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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Michael E. Moseley et al. Examiner: Unknown  
Serial No. 09/606,137 Group Art Unit: 3736  
Filed: June 28, 2000 Docket No. 500.003US1  
Title: IMAGING METHODS FOR VISUALIZING IMPLANTED LIVING CELLS

**COMMUNICATION RE: INCORRECT FILING RECEIPT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Applicants hereby request correction of the Filing Receipt with respect to the above-identified patent application. In the Filing Receipt received September 18, 2000, (copy enclosed), the name of the second applicant is incorrect. The Filing Receipt reads, John Kucharczy, it should read John Kucharczyk. This is evidenced by the title page, and the Declaration and Power of Attorney form, upon the original copy of the patent application (enclosed).

Applicants would appreciate the above-identified printing error be corrected and that a new "corrected" filing receipt be sent to Applicants' representatives at the address given below.

Respectfully submitted,

MICHAEL E. MOSELEY et al.

By their Representatives,

Mark A. Litman & Associates, P.A.  
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Date: 13 October 2000

By: Mark A. Litman

Mark A. Litman  
Reg. No. 26,390

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## FILING RECEIPT

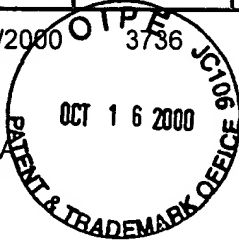


\*OC000000005353379\*

UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark OfficeAddress: ASSISTANT SECRETARY AND  
COMMISSIONER OF PATENT AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/606,137	06/28/2000	3736	0	500.003US1	-	29	2

Mark A Litman  
 Mark A Litman & Associates P  
 York Business Center Ste 205  
 3209 W 76th Street  
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Date Mailed: 08/25/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

## Applicant(s)

Michael E. Moseley, Redwood City, CA ;  
 John Kucharczy, Novato, CA ;

## Continuing Data as Claimed by Applicant

## Foreign Applications

If Required, Foreign Filing License Granted 08/24/2000

\*\* SMALL ENTITY \*\*

## Title

Imaging methods for visualizing implanted living cells

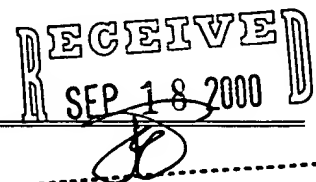
## Preliminary Class

600

Data entry by : JORDAN, STANLEY

Team : OIPE

Date: 08/25/2000



**IMAGING METHODS FOR VISUALIZING IMPLANTED LIVING CELLS**

**BACKGROUND OF THE INVENTION**

5     **1. FIELD OF THE INVENTION**

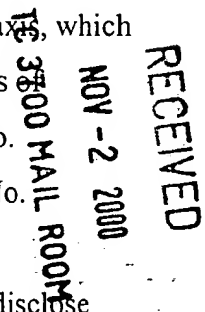
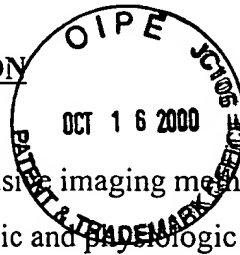
This invention relates to non-invasive imaging methods for visualizing implanted living cells and for assessing the metabolic and physiologic viability of implanted living cells and their progeny.

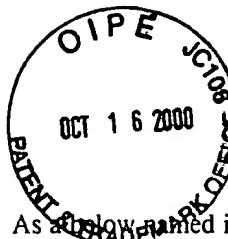
10     **2. BACKGROUND OF THE ART**

Current technologies make it possible to measure intracranial pressure (U.S. Patent No. 5,107,847), deliver drugs in a rate-controlled manner (U.S. Patent No. 5,836,935), infuse various substances into the brain (U.S. Patent No. 5,720,720), and convey fluids out of the brain (U.S. Patent No. 5,772,625). Further illustrative examples of functional intracranial probes include U.S. Pat. No. 5,843,150 to Dreessen et al., U.S. Patent No. 5,861,019 to Sun et al., U.S. Patent No. 5,843,148 to Gijssbers et al., U.S. Patent No. 5,820,589 to Torgerson et al., U.S. Patent No. 5,821,011 to Taylor et al., U.S. Patent No. 5,826,576 to West, U.S. Patent No. 5,858,009 to Jonkman, and PCT application W09807367A1 to Jolecz et al.

U.S. Patent No. 5,125,888, 5,707,335, 5,779,694, and 5,843,093 disclose intracranial probes that can be positioned within the brain by magnetic stereotaxis, which probes are also visible under magnetic resonance (MR) imaging. Several types of implantable neurostimulator devices, such as those described in U.S. Patent No. 5,344,439 to Otten, U.S. Patent No. 4,800,898 to Hess et al., and U.S. Patent No. 4,549,556 to Tarjan et al., have also been disclosed.

U.S. Patents Nos. 5,711,316, 5,713,923, 5,735,814, 5,832,932, and 5,978,702 disclose implantable pumps and catheters for infusing drugs into the brain to treat movement disorders, wherein a sensor detects the symptoms resulting from the movement disorder and a microprocessor algorithm analyzes the output from the sensor to regulate the amount of drug delivered to the brain. U.S. Patent No. 5,607,418 to Arzbaecher discloses an implantable drug delivery apparatus comprising a housing with a plurality of drug compartments that can be opened in a timed manner by, for example, a gas-generating





MARK A. LITMAN & ASSOCIATES, P.A.

# United States Patent Application

## COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor WE hereby declare that: our residence, post office address and citizenship are as stated below next to our names; that

We verily believe We are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled: IMAGING METHODS FOR VISUALIZING IMPLANTED LIVING CELLS The specification of which is attached hereto.

We hereby state that We have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (see page 3 attached hereto).

We hereby claim foreign priority benefits under Title 35, United States Code, §119/365 of any foreign application(s) for patent of inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

**No such applications have been filed.**

We hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

**No such applications have been filed.**

We hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

**No such applications have been filed.**

We hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Litman, Mark A.

Reg. No. 26,390

We hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which We hereby declare that We have consented after full disclosure to be represented unless/until We instruct Mark A. Litman to the contrary.

Please direct all correspondence in this case to Mark A. Litman & Associates, P.A. at the address indicated below:

3209 West 76th St.  
York Business Center, Suite 205  
Edina, MN 55435  
Telephone No. (952)832.9090

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 1: Michael E. Moseley  
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Date: \_\_\_\_\_

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Post Office Address: : 261 Wilson Avenue,  
Novato, California 94947

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
  - (i) Opposing an argument of unpatentability relied on by the Office, or
  - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

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Bib Data Sheet

<b>SERIAL NUMBER</b> 09/606,137	<b>FILING DATE</b> 06/28/2000 <b>RULE</b> _	<b>CLASS</b> 600	<b>GROUP ART UNIT</b> 3736	<b>ATTORNEY DOCKET NO.</b> 500.003US1
<b>APPLICANTS</b> Michael E. Moseley, Redwood City, CA ; John Kucharczyk, Novato, CA ; <b>** CONTINUING DATA *****</b> <b>** FOREIGN APPLICATIONS *****</b> <b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 08/24/2000</b>				
Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after Allowance Verified and Acknowledged <u>24 C</u> Examiner's Signature Initials		<b>STATE OR COUNTRY</b> CA	<b>SHEETS DRAWING</b> _	<b>TOTAL CLAIMS</b> 29
				<b>INDEPENDENT CLAIMS</b> 2
<b>ADDRESS</b> Mark A Litman Mark A Litman & Associates PA York Business Center Ste 205 3209 W 76th Street Edina ,MN 55402				
<b>TITLE</b> Imaging methods for visualizing implanted living cells				
<b>FILING FEE RECEIVED</b> 420	<b>FEES:</b> Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit	

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